

**Supplementary Table 2.** Effect of anthropometric indices on the incident diabetes: women ( $n=3,153$ )

Anthropometric & body composition indices	Baseline measurements						Repeated measurements								
	Prediction power			500 times Bootstrap			Prediction power			500 times Bootstrap			Repeated vs. baseline		
	Harrell's C-index	Lower 95% CI	Upper 95% CI	LR test	Harrell's C-index	Lower 95% CI	Upper 95% CI	LR test	Harrell's C-index	Lower 95% CI	Upper 95% CI	LR test			
Basic model	0.636	0.611	0.661	Ref	0.618	0.593	0.643	Ref	0.611	0.661	Ref	0.618	0.593	0.643	0.299
ABSI	0.640	0.615	0.665	0.093	0.621	0.597	0.645	0.012	0.618	0.668	0.012	0.624	0.599	0.648	0.738
BAI	0.659	0.634	0.684	<0.001	0.642	0.619	0.666	<0.001	0.632	0.682	<0.001	0.640	0.616	0.665	0.019
WC	0.673 <sup>b</sup>	0.648 <sup>b</sup>	0.698 <sup>b</sup>	<0.001	0.658	0.635	0.683	<0.001	0.662 <sup>b</sup>	0.712 <sup>b</sup>	<0.001	0.673	0.649	0.697	0.007
BMI	0.678 <sup>ab</sup>	0.654 <sup>b</sup>	0.702 <sup>b</sup>	<0.001	0.663 <sup>a</sup>	0.639	0.689	<0.001	0.665 <sup>b</sup>	0.715 <sup>b</sup>	<0.001	0.676	0.652	0.700	0.001
WHR	0.661 <sup>b</sup>	0.636 <sup>b</sup>	0.686 <sup>b</sup>	<0.001	0.645	0.622	0.668	<0.001	0.667 <sup>b</sup>	0.715 <sup>b</sup>	<0.001	0.677 <sup>a</sup>	0.651	0.699	0.084
Weight-adjusted SMI	0.659	0.634	0.684	<0.001	0.643	0.618	0.668	<0.001	0.645 <sup>b</sup>	0.695 <sup>b</sup>	<0.001	0.656	0.632	0.679	0.097
PBF	0.659	0.634	0.684	<0.001	0.643	0.618	0.667	<0.001	0.668 <sup>b</sup>	0.643 <sup>b</sup>	<0.001	0.653	0.629	0.677	0.038
FMR	0.658	0.633	0.683	<0.001	0.641	0.617	0.666	<0.001	0.669 <sup>b</sup>	0.644 <sup>b</sup>	<0.001	0.655	0.631	0.678	

The basic model included age, education levels, physical activity, alcohol intake, current smoking, total energy intake, dietary diversity score, and log-transformed C-reactive protein levels, and quartiles of unweighted genetic risk score at baseline. *P* for the LR test was presented as a Bonferroni-adjusted *P* value, taking into account the number of hypothesis tests. CI, confidence interval; LR, likelihood ratio; ABSI, a body shape index; BAI, body adiposity index; WC, waist circumference; BMI, body mass index; WHR, waist-to-hip ratio; SMI, skeletal muscle index; PBF, percent body fat; FMR, fat-to-muscle ratio.

<sup>a</sup>The highest Harrell's C-index among the indices within the same column, <sup>b</sup>The indices have a Bonferroni-adjusted *P* value greater than 0.05, indicating no significant difference between them within the same column.